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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/810,508 | 03/26/2004 | Byron J. Saari | M93.12-0391 | 8152 |

27367 7590 02/26/2007
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| EXAMINER |
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CHENG, JOE H

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| ART UNIT | PAPER NUMBER |
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3714

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 02/26/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/810,508

Applicant(s)

SAARI ET AL.

Examiner

Joe H. Cheng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/21/04, 2/28/05, 10/10/06</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: The reference number "242" for the video imaging system on paragraph 0037 should be recited as --244--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 10-18, 23 and 24 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not understood as to what the cited motion controller to impart the plurality of multi-axial forces are being used for (as per claims 10-16). In other words, the cited structural elements cannot perform the function of vehicle crash simulation as claimed, so as to provide the simulation of the crash motion or force to the simulation platform. In addition, the structural element of the video imaging system to control operation of the simulator (as per claim 17) and to provide acceleration or motion feedback to the simulator (as per claim 18) is misdescriptive, because the video imaging system is used for providing feedback images for the vehicle crash simulator, and the system controller is used for controlling the operation of the simulator. Further, the antecedent basis for "the step of simulating crash acceleration or motion" (as per claims 23 and 24) has not been clearly set forth.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-26 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Treusch et al (German Pat. No. DE 101 18 682 A1). The teaching of Treusch et al broadly discloses the vehicle crash simulator comprising the simulation platform (10) is on-board a base sled (5, 9) and is movable along a track formed of opposed spaced rails (3), the motion controller for operating the motion generator including a plurality of actuators (14, 15) coupled to the opposed end of the simulation platform, so as to provide the impart force and motion along the z-axis of the simulation platform (Fz), and one of the force and motion (Fy) and motion (Fx) along the x or y axes of the simulation platform (see paragraph [0026]-[0029]), so as to simulate the crash forces or motions simulating pitch, yaw and roll motion of the vehicle crash, the velocity generator (13) for imparting a crash acceleration to the simulation platform, and the video imaging system including a video camera to capture the image of a simulated crash event (see paragraph [0030]).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Redenbaugh (U.S. Pat. No. 4,580,985) discloses the simulator device for demonstrating the benefit of wearing a vehicle safety harness by placing a dummy on a seat connected to and moveable along the track to simulate the person seated in a vehicle, means for propelling the seat

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forwardly along the track while stop means for limiting the forward movement of the seat along the track, and the impact shields mounted on the end of the track for impacting the dummy. Hupfer (U.S. Pat. No. 5,338,206) teaches the apparatus and method for testing effects of a motor vehicle accident by guiding one or two motor vehicle to reproduce the accident as it actually occurred. Stein et al (U.S. Pat. No. 5,483,845) discloses the apparatus and method for side impact testing. Cerny (U.S. Pat. No. 5,635,624) teaches the apparatus for carrying out a crash test on a motor vehicle. Shiraishi et al (U.S. Pat. No. 6,431,872 B1) discloses the drive simulation apparatus having the cockpit supported on a motion base for making swing movement. Kojima et al (U.S. Pat. No. 6,997,036 B2) teaches the vehicle impact testing device with a towing device for running a test car along a running road surface to collide with a barrier. Jiyunichi (Japanese Pub. No. 07-271290) discloses the car collision simulator and testing method. Toda et al (Japanese Pub. No. 08-101635) teaches the simulator for automobile collision acceleration. Hashiguchi et al (Japanese Pub. No. 10-020764) discloses the car crash simulating and experiencing device. Nishimura et al (Japanese Pub. No. 2002-162313) teaches the servo actuator device in vehicle crash simulator.

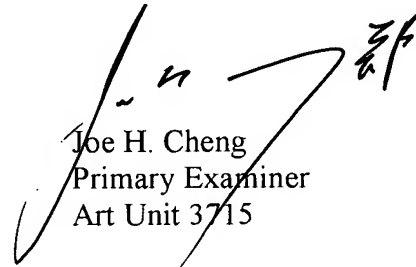
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe H. Cheng whose telephone number is (571)272-4433. The examiner can normally be reached on Tue. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on (571)272-6788. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joe H. Cheng
February 15, 2007


Joe H. Cheng
Primary Examiner
Art Unit 3715